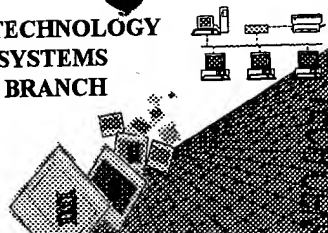# RAW SEQUENCE LISTING
ERROR REPORT

**BIOTECHNOLOGY
SYSTEMS
BRANCH**

1627

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The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: __09/425,804B__

Source: __1600__

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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

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PATENTIN 2.1 e-mail help: **patin21help@uspto.gov** or phone 703-306-4119 (R. Wax)
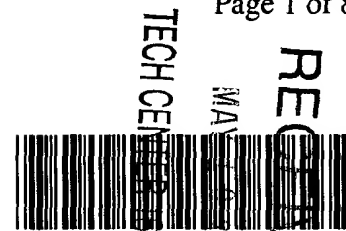PATENTIN 3.0 e-mail help: **patin3help@uspto.gov** or phone 703-306-4119 (R. Wax)

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Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
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3. **Hand Carry directly to:**
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Revised 01/29/2002

RAW SEQUENCE LISTING   DATE: 05/01/2002
PATENT APPLICATION: US/09/425,804B   TIME: 12:34:25

        Input Set : A:\09425804_Ref No 122144-1001 SEQ ID LISTING.txt
        Output Set: N:\CRF3\05012002\I425804B.raw

```
 4 <110> APPLICANT: Gorenstein, David G.
 5        Luxon, Bruce A.
 6        Herzog, Norbert
 7        Aronson, Judy
 9 <120> TITLE OF INVENTION: Thio-Modified Aptamer Synthetic Methods and
10        Compositions
12 <130> FILE REFERENCE: 122144-001001
14 <140> CURRENT APPLICATION NUMBER: 09/425,804B
15 <141> CURRENT FILING DATE: 1999-10-25
17 <150> PRIOR APPLICATION NUMBER: 60/105,600
18 <151> PRIOR FILING DATE: 1998-10-26
20 <160> NUMBER OF SEQ ID NOS: 50
22 <170> SOFTWARE: PatentIn Ver. 2.1
```

ERRORED SEQUENCES

```
     24 <210> SEQ ID NO: 1
     25 <211> LENGTH: (66)
     26 <212> TYPE: DNA
     27 <213> ORGANISM: Artificial Sequence
     29 <220> FEATURE:
     30 <221> NAME/KEY: misc_feature
     31 <222> LOCATION: (24)..(44)
     32 <223> OTHER INFORMATION: n is A, T, G or C
     34 <220> FEATURE:
     35 <223> OTHER INFORMATION: Description of Artificial Sequence; aptamer
     37 <400> SEQUENCE: 1
E--> 38 cagtgctcta gaggatccgt gacnnnnnn nnnnnnnnn nnnncgaag cttatcgatc  (60)   - line count is
E--> 39 cgagcg            66                                                         59
    399 <210> SEQ ID NO: 33
    400 <211> LENGTH: 14
    401 <212> TYPE: DNA
    402 <213> ORGANISM: Artificial Sequence
    404 <220> FEATURE:
    405 <221> NAME/KEY: modified_base
    406 <222> LOCATION: (2)
    407 <223> OTHER INFORMATION: thymidine 3'-O-phosphorothioate
    409 <220> FEATURE:
    410 <221> NAME/KEY: modified_base
    411 <222> LOCATION: (12)
    412 <223> OTHER INFORMATION: thymidine 3'-O-phosphorothioate
    414 <400> SEQUENCE: 33
```

RAW SEQUENCE LISTING   DATE: 05/01/2002
PATENT APPLICATION: US/09/425,804B   TIME: 12:34:25

Input Set : A:\09425804_Ref No 122144-1001 SEQ ID LISTING.txt
Output Set: N:\CRF3\05012002\I425804B.raw

```
E--> 415 gtgggaatctc ctgg              (14) — line count is 15
     435 <210> SEQ ID NO: 35
     436 <211> LENGTH: 14
     437 <212> TYPE: DNA
     438 <213> ORGANISM: Artificial Sequence
     440 <220> FEATURE:
     441 <221> NAME/KEY: modified_base
W--> 442 <212> TYPE: (2)         change to <222>   — only needed once
E--> 442 <212> TYPE: (2)  delete
W--> 443 <213> ORGANISM: thymidine 3'-O-phosphorothioate
     445 <220> FEATURE:
     446 <221> NAME/KEY: modified_base
     447 <222> LOCATION: (7)
     448 <223> OTHER INFORMATION: thymidine 3'-O-phosphorothioate
     450 <220> FEATURE:
     451 <221> NAME/KEY: modified_base
     452 <222> LOCATION: (9)
     453 <223> OTHER INFORMATION: thymidine 3'-O-phosphorothioate
     455 <220> FEATURE:
     456 <221> NAME/KEY: modified_base
     457 <222> LOCATION: (12)
     458 <223> OTHER INFORMATION: thymidine 3'-O-phosphorothioate
     460 <400> SEQUENCE: 35
     461 gtggaatctc ctgg          14
     463 <210> SEQ ID NO: 36
     464 <211> LENGTH: 14
     465 <212> TYPE: DNA
     466 <213> ORGANISM: Artificial Sequence
     468 <220> FEATURE:
     469 <221> NAME/KEY: modified_base
W--> 470 <212> TYPE: Compliment (2)      — same error as before  <222>
E--> 470 <212> TYPE: Compliment (2)
W--> 471 <213> ORGANISM: phosphorothioate         change to <223>
     473 <220> FEATURE:
     474 <221> NAME/KEY: modified_base          — same  <222>
W--> 475 <212> TYPE: Compliment (12)
E--> 475 <212> TYPE: Compliment (12)
W--> 476 <213> ORGANISM: phosphorothioate         change to <223>
     478 <220> FEATURE:
     479 <223> OTHER INFORMATION: Description of Artificial Sequence: aptamer
     481 <400> SEQUENCE: 36
     482 ccaggagatt ccac          14
     484 <210> SEQ ID NO: 37
     485 <211> LENGTH: 14
     486 <212> TYPE: DNA
     487 <213> ORGANISM: Artificial Sequence
     489 <220> FEATURE:
     490 <221> NAME/KEY: modified_base
W--> 491 <212> TYPE: Compliment (5)

                    <222>
```

```
E--> 491  <212> TYPE: Compliment (5)    delete
W--> 492  <213> ORGANISM: phosphorothioate        -> <223>
     494  <220> FEATURE:
     495  <221> NAME/KEY: modified_base
W--> 496  <212> TYPE: Compliment (7)  -> <222>
E--> 496  <212> TYPE: Compliment (7)   delete
W--> 497  <213> ORGANISM: phosphorothioate      -> <223>
     499  <220> FEATURE:
     500  <223> OTHER INFORMATION: Description of Artificial Sequence: aptamer
     502  <400> SEQUENCE: 37
     503  ccaggagatt ccac          14
     562  <210> SEQ ID NO: 40
     563  <211> LENGTH: 14
     564  <212> TYPE: DNA
     565  <213> ORGANISM: Artificial Sequence
     567  <220> FEATURE:
     568  <221> NAME/KEY: modified_base
     569  <222> LOCATION: (9)..(10)
     570  <223> OTHER INFORMATION: phosphorothioate
     572  <220> FEATURE:
     573  <221> NAME/KEY: modified_base
     574  <222> LOCATION: Complement (5)
     575  <223> OTHER INFORMATION: phosphorothioate
     577  <220> FEATURE:
     578  <221> NAME/KEY: modified_base
     579  <222> LOCATION: Complement (7)
     580  <223> OTHER INFORMATION: phosphorothioate
     582  <220> FEATURE:
     583  <223> OTHER INFORMATION: Description of Artificial Sequence: aptamer
E--> 585  <400> SEQUENCE: 38
     586  ccaggagatt ccac          14      -> Skipped sequence, see p.5
E--> 588  <210> SEQ ID NO: 40
     589  <211> LENGTH: 14
     590  <212> TYPE: DNA
     591  <213> ORGANISM: Artificial Sequence
     593  <220> FEATURE:
     594  <221> NAME/KEY: modified_base
     595  <222> LOCATION: (9)..(10)
     596  <223> OTHER INFORMATION: phosphorothioate
     598  <220> FEATURE:
     599  <221> NAME/KEY: modified_base
     600  <222> LOCATION: Complement (2)
     601  <223> OTHER INFORMATION: phosphorothioate
     603  <220> FEATURE:
     604  <221> NAME/KEY: modified_base
     605  <222> LOCATION: Complement (5)
     606  <223> OTHER INFORMATION: phosphorothioate
     608  <220> FEATURE:
     609  <221> NAME/KEY: modified_base
```

```
              RAW SEQUENCE LISTING              DATE: 05/01/2002
              PATENT APPLICATION:  US/09/425,804B      TIME: 12:34:25

              Input Set : A:\09425804_Ref No 122144-1001 SEQ ID LISTING.txt
              Output Set: N:\CRF3\05012002\I425804B.raw
```

```
        610 <222> LOCATION: Complement (7)
        611 <223> OTHER INFORMATION: phosphorothioate
        613 <220> FEATURE:
        614 <221> NAME/KEY: modified_base
        615 <222> LOCATION: Complement (12)
        616 <223> OTHER INFORMATION: phosphorothioate
        618 <220> FEATURE:
        619 <223> OTHER INFORMATION: Description of Artificial Sequence: aptamer
E-->    621 <400> SEQUENCE: (41) — no. differs from Seq. ID No.
        622 ccaggagatt ccac          14
E-->    624 <210> SEQ ID NO: (42) — should be 41
        635 <210> SEQ ID NO: 43
        636 <211> LENGTH: 43
        637 <212> TYPE: DNA
        638 <213> ORGANISM: Artificial Sequence
        640 <220> FEATURE:
        641 <221> NAME/KEY: modified_base
W-->    642 <212> TYPE: (9)           —> <222>
E-->    642 <212> TYPE: (9) delete
W-->    643 <213> ORGANISM: phosphorodithioate   —> <223>
        645 <220> FEATURE:
        646 <221> NAME/KEY: modified_base
W-->    647 <212> TYPE: (20)          —> <222>
E-->    647 <212> TYPE: (20) delete
W-->    648 <213> ORGANISM: phosphorodithioate
        650 <220> FEATURE:            —> <223>
        651 <221> NAME/KEY: modified_base
W-->    652 <212> TYPE: (9)    —> <222>
E-->    652 <212> TYPE: (9)
W-->    653 <213> ORGANISM: phosphate ester    —> <223>
        655 <220> FEATURE:
        656 <221> NAME/KEY: modified_base
W-->    657 <212> TYPE: (20)      —> <222>
E-->    657 <212> TYPE: (20) delete
W-->    658 <213> ORGANISM: phosphate ester    —> <223>
W-->    660 <223> OTHER INFORMATION:
        660 <400> SEQUENCE: 43
E-->    661 ccaggagatt ccactttgt ggaatctcct gga          43
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 05/01/2002
PATENT APPLICATION: US/09/425,804B   TIME: 12:34:26

Input Set : A:\09425804_Ref No 122144-1001 SEQ ID LISTING.txt
Output Set: N:\CRF3\05012002\I425804B.raw

Skipped Sequences(NEW RULES):
Sequence(s)__missing. If intentional, please use the following format for
each skipped sequence.
<210> sequence id number
<400> sequence id number
000

Seq#:41

Use of <220> Feature(NEW RULES):
Sequence(s)__are missing the <220> Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence"
or"Unknown". Please explain source of genetic material in <220> to <223>
section (See "Federal Register," 6/01/98, Vol. 63, No. 104,pp.29631-32)
(Sec.1.823 of new Rules)

Seq#:2,14,25,43

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/425,804B

DATE: 05/01/2002
TIME: 12:34:26

Input Set : **A:\09425804_Ref No 122144-1001 SEQ ID LISTING.txt**
Output Set: **N:\CRF3\05012002\I425804B.raw**

```
L:38 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:38 M:254 E: No. of Bases conflict, LENGTH:Input:60 Counted:59 SEQ:1
M:254 Repeated in SeqNo=1
L:39 M:252 E: No. of Seq. differs, <211> LENGTH:Input:66 Found:65 SEQ:1
L:46 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:48 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:159 M:282 W: Numeric Field Identifier Missing, <212> is required.
L:176 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:178 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:178 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:298 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:298 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:317 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:415 M:254 E: No. of Bases conflict, LENGTH:Input:14 Counted:15 SEQ:33
L:415 M:252 E: No. of Seq. differs, <211> LENGTH:Input:14 Found:15 SEQ:33
L:442 M:280 W: Numeric Identifier already exists, Type not replaced.
L:442 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:443 M:280 W: Numeric Identifier already exists, Organism not replaced.
L:470 M:280 W: Numeric Identifier already exists, Type not replaced.
L:470 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:471 M:280 W: Numeric Identifier already exists, Organism not replaced.
L:475 M:280 W: Numeric Identifier already exists, Type not replaced.
L:475 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:476 M:280 W: Numeric Identifier already exists, Organism not replaced.
L:491 M:280 W: Numeric Identifier already exists, Type not replaced.
L:491 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:492 M:280 W: Numeric Identifier already exists, Organism not replaced.
L:496 M:280 W: Numeric Identifier already exists, Type not replaced.
L:496 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:497 M:280 W: Numeric Identifier already exists, Organism not replaced.
L:585 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:40 differs:38
L:588 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO:40
L:621 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:40 differs:41
L:624 M:214 E: (33) Seq.# missing, SEQ ID NO:41
L:642 M:280 W: Numeric Identifier already exists, Type not replaced.
L:642 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:643 M:280 W: Numeric Identifier already exists, Organism not replaced.
L:647 M:280 W: Numeric Identifier already exists, Type not replaced.
L:647 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:648 M:280 W: Numeric Identifier already exists, Organism not replaced.
L:652 M:280 W: Numeric Identifier already exists, Type not replaced.
L:652 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:653 M:280 W: Numeric Identifier already exists, Organism not replaced.
L:657 M:280 W: Numeric Identifier already exists, Type not replaced.
L:657 M:310 E: (3) Wrong or Missing Sequence Type, TYPE:
L:658 M:280 W: Numeric Identifier already exists, Organism not replaced.
```

VERIFICATION SUMMARY
DATE: 05/01/2002
PATENT APPLICATION: US/09/425,804B
TIME: 12:34:26

Input Set : **A:\09425804_Ref No 122144-1001 SEQ ID LISTING.txt**
Output Set: **N:\CRF3\05012002\I425804B.raw**

L:660 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:661 M:254 E: No. of Bases conflict, LENGTH:Input:43 Counted:33 SEQ:43
L:661 M:252 E: No. of Seq. differs, <211> LENGTH:Input:43 Found:33 SEQ:43